

2004 Report of Accomplishments

Franklin Conservation District



Natural Resource Improvements in 2004 - Summary

- *Implementation of agricultural best management practices prevented an estimated 484,600 pounds of nitrogen from entering the ground water system in Franklin County.*
- *Reducing irrigated agriculture's contribution to high nitrate levels in ground water was the major focus of the Franklin Conservation District's natural resource activities.*
- *More than 8,500 students and other individuals received training through the District's educational programs.*



Salmon in the Classroom Release at Chiawana Park, Pasco WA, March 30, 2004

Mission of the Franklin Conservation District

- *The Franklin Conservation District promotes the conservation and wise use of natural resources by providing technical and financial assistance to landowners.*

Water Quality Implementation

- *The FCD is working with dairy operators to demonstrate the use of low volume-high frequency manure applications to reduce potential nitrate contamination of the groundwater.*
- *Soil sampling to a depth of 10 feet is being conducted on 4 dryland field plots which have received up to four times the recommended nitrogen application rates. The goal is to assess whether nitrate migration in dryland production is of concern in the low rainfall zones.*
- *Crop water use charts were published weekly in 2 newspapers during the 2004 growing season.*

Columbia Basin Ground Water Management Area (GWMA)

- *Technical assistance was provided for the GWMA's irrigation water management (IWM) and deep soil sampling programs. \$141,112 in financial assistance was provided to 66 growers to implement IWM on 24,234 acres.*
- *Six growers participated in the deep soil sampling program with 30 fields sampled to a depth of 10 feet and 316 samples analyzed.*
- *Phase Two of a three-dimensional model of the sub-surface geology was initiated for the GWMA Geologic Framework project. This phase involves mapping the sediment units in the GWMA geographic area. These sediment layers commonly host shallow aquifers which are more vulnerable to contamination. This model assists in the mapping and identification of the areas aquifers and is invaluable for water quality and water quantity planning and implementation activities.*
- *The FCD provided staff for the Water on Wheels (WOW) program. The program was delivered to 277 classes including 500 adults, and 8,500 students. WOW provides lively hands-on demonstrations, educational computer games, and even field trips to educate students about watersheds, soils, groundwater, and conservation.*

Dairy

The CD assisted with the implementation of irrigation water management on 915 acres that received dairy nutrients.

Of the thirteen dairies in Franklin County a total of nine were certified by the December 31, 2003 deadline. The District assisted two additional dairies with applying for and receiving extensions of the certification deadline. The District's focus in 2004 was assisting producers with record keeping and it will continue to be a focus of the District's Dairy Program.

- *Financial assistance totaling \$43,732 was provided for the installation of 5 waste transfer systems*
- *Irrigation water management was implemented on 915 acres that received dairy nutrients..*
- *Thirteen dairies with a total of 6,292 acres are covered by dairy nutrient management plans in Franklin County. Two plans have been certified.*

Water Quality Education

- The web site at www.franklincd.org was maintained and updated with current information on District projects.
- Five schools participated in the Salmon in the Classroom Program in 2004 with approximately 400 students joining in on the fun.
- Eleven classes (218 students) were taught on using GIS to understand local watersheds, and to visualize water quality problems.

Ground Water Monitoring

- Samples from 159 wells were collected and analyzed for nitrate-nitrogen. This is part of the District's long term study of nitrate trends and temporal variations.

Geographic Information System (GIS)

- Updates were made to the Franklin County fields database using 2002 aerial photos with a one-foot resolution. Field boundaries are used in numerous District programs.
- More than 100 GIS maps were prepared for growers and other land managers.
- The atlas of the counties' fields was re-produced using the updated fields boundaries. The atlas is used by growers, agencies, and businesses for agricultural production and environmental planning purposes.

Franklin County Water Conservancy Board

- Staff support continues to be provided to the Franklin County Water Conservancy Board to facilitate water right transfers and changes.

Air Quality

- The Franklin Conservation District issues agricultural burn permits for Franklin County. Technical assistance is provided to help growers comply with the burn permit requirements and to reduce smoke emissions.

Remote Sensing

- Using satellite imagery and the District's GIS, crops were identified for every field in Franklin County. The crop information is then used to develop a ground water nitrate leaching index which helps focus limited financial and technical assistance funds.
- Satellite images were used to create county and regional maps that have been well accepted by growers and the public.

Wildlife Habitat

- The FCD participated with the Washington Department of Fish and Wildlife in funding the purchase of 7 wildlife watering facilities (guzzlers).

Perennial Wheat

- The effectiveness of perennial wheat as an erosion buffer in reducing sediments and sediment related nutrients from entering surface runoff will be evaluated. Two sites were chosen in Franklin County and one in Whitman County. This is a joint project between the FCD and WSU.

Washington Conservation Districts assisting land managers with their conservation choices

